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CATARACT AT FOSSVÖLLUM—ICELAND.

[Fossvöllum, Iceland.—From 'Voyage en Islande et au Groënland.']

THE volcanic character of the island of Iceland, and the many convulsions which it has experienced at various periods, rending asunder the mountains, throwing obstructions in the way of the rivers, and producing rents and chasms in the valleys, explain the origin of the many waterfalls and cascades which the traveller meets with in that bleak and desolate country. In many parts, especially in the neighbourhood of volcanic mountains, cataracts abound, generally presenting features of the most terrific but picturesque character. There are many worth visiting in the neighbourhood of the Geysers, or Hot Springs, in the western part of the island, but perhaps the most remarkable is one on the eastern coast near *Hof*. This *foss*, or waterfall, is surrounded by many lesser cataracts, which in another place would be viewed with the most lively interest, several of them falling more than 100 feet; but in the neighbourhood of the more important one, which is represented in the engraving, they sink into comparative insignificance.

In visiting Fossvöllum from Hof the margins of several of these springs have to be traversed, and travellers find it necessary to proceed with the greatest caution. The whole tract,—road it cannot be called, for it would be impossible for any wheeled-carriage to pass over it,—by which the Falls are approached from Hof, is dreary and mountainous, intersected by chasms at which the traveller shudders as he looks down the abyss, now winding around the side of a mountain, and then descending the abrupt declivity of a ravine, until it leads to within ear-shot of the sound of the falling waters. Here it stretches across a morass of considerable extent, in passing which the traveller has a good opportunity of putting the waterproof properties of his boots to a test the excellence of which no man in his senses would hesitate to admit. "Continuing still to descend" (says Mr. Henderson, in his 'Tour of Iceland') "through alternate tracts of stones and morass, we arrived a little before twilight at a rich farm called *Fossvöllum*, or the Cataract Plains, from the noble cataract close behind the houses. Independent of the contrast formed by the dreariness of the *heidè*, the landscape at this place presented one of the most beautiful rural scenes I had met with on my journey. The troubled waters, dashing over a precipice of rugged rocks, both sides of which are lined with verdant meads—the gentle elevations which encircle the plains, the stately appearance of the farm, the extent and verdure of the *tûn*, and the number of sheep, cows, and horses, that were feeding in every direction, produced altogether an effect

the most lively and pleasing. I pitched my tent at the margin of the river, about half a stone-cast from the cataract, and was soon lulled asleep by the sound of the struggling stream.

"It being late ere the mowers quitted the scythe, I did not see the proprietor (Rusticus Biörnson) till early the following morning, when he paid me a visit in my tent, and told me he was quite angry with me for not having slept in the house."

The waters roll sullenly forward along the plains until they arrive at an extended and precipitous break, where they shoot over in one sheet until within a short distance from the ground, when the waters are separated into thousands of sparkling streams and innumerable particles of spray flying about in all directions. The water then glides swiftly along the plains below, passing by the farm of Biörnson, which is of considerable extent. Few spectacles can be more magnificent than that which these Falls present. It is worth the disagreeable journey to behold the unbroken surface of the water shining like silver in the rays of the sun, until half way down it becomes expanded, and appears to be swallowed up in a cloud of snow, which the particles of spray closely resemble, and from which the stream below appears bursting, and apparently commencing a new existence as it ripples joyously over the pebbles beneath. But it is at night, when the moon is shining in the heavens with sufficient power to define the objects around, that the "Cataract of the Plains" is to be seen with the greatest advantage, and when it excites the most lively admiration.

The indistinct mountainous tract, stretching away in the distance, the huge masses of rock that lie strewed around, and the buildings of the farm, seen as they are but imperfectly, afford greater play to the imagination, which, excited by the roaring of the cataract (the only thing which night renders more near and distinct), exerts its influence on the spectator, who stands as if under the spell of an enchanter, wrapped up in the contemplation of the scene.

Fossvöllum is situated on the north-eastern coast of Iceland, in 30° N. latitude, and between 14° and 15° W. longitude. The farm of Biörnson, which, although at a distance from the Falls, appears to lie almost under the cataract, is conducted with much skill. Henderson describes the proprietor as endued with the true spirit of hospitality which distinguishes the inhabitants of the island generally, and as a man well versed in the precepts of Scripture, which he practised with the simplicity of the patriarchal times. At the period of Henderson's visit, he was endeavouring to render the Bible more common among the peasantry, and striving to make them appreciate the contents. From the simplicity with which the Icelander lives, cut off from all but a very partial connexion with the rest of the world, the habits of the present generation are those of their ancestors, and we may therefore conclude that the farm of Biörnson is now little altered from the appearance it presented when Henderson visited it; but from the general duration of human life, it is most probable that the good old man no longer cheers the social circle with his presence. It is satisfactory however to know that the exertions which he made, together with other kindred spirits, to render a knowledge of religion familiar to the Icelanders, have been attended with the happiest results.

The reader is referred to former numbers of this work for a sketch of the history and other matters connected with Iceland.

ON ARTIFICIAL GEMS.

MAN is by nature an imitator, whether as regards manners and customs, or the various manufacturing processes which conduce either to his conveniences or to his luxuries. If a particular style of garment be introduced by the wealthy, its use gradually extends to the poorer classes of society; and the increased demand suggests improved modes of production: the truth of this remark is sufficiently attested by our silk and broad-cloth manufactures.

It is from a similar impulse that attempts have been made from early ages to imitate the appearance of those rare and costly gems, the possession of which is necessarily confined to the wealthy classes. Young and old, of all ranks, have admired the brilliant transparency of the diamond, the purple of the ruby, the blue of the sapphire, the green of the emerald, the orange tint of the hyacinth, the transparent blood-red of the garnet, the variegated tints of the agate and porphyry, and the delicate subdued whiteness of the pearl; and we can scarcely wonder that a desire for preparing imitative copies of them should spring up.

When glass contains certain metallic particles, they usually impart a tint of colour to it, varying according to the nature and quantity of the metal: in the plate and crown-glass manufactures, metallic oxides are always used to counteract the colouring effect of other ingredients, by tending to impart a different tint, the combined effect of the two producing colourless transparency. Now as this property of metallic particles must have been known from the first epoch of the glass manufacture, it required but another step to make it available for the production of imitative gems.

Pliny mentions artificial hyacinths and sapphires, and also a black glass which resembled obsidian stone, and which he calls *gemmæ vitriæ* (glass gems). The Emperor Adrian received as a present from an Egyptian priest several glass cups which sparkled with colours of every kind, and which, as costly wares, he ordered to be used only on grand occasions. That the Romans frequently used coloured glass for jewels, is inferred from the fact, that in the collection of antiquities in the Museum Victorium at Rome there are shown an artificial chrysolite and an emerald, both of which are so well executed, that they are not only perfectly coloured and transparent throughout, but neither externally nor internally have they any blemish.

About the year 1685, Andrew Cassius, physician to the Bishop of Lubeck, devised a mode of imitating rubies in a more perfect manner than had been before known. This was by dissolving gold in a mixture of muriatic and nitric acids, called *aqua regia*, or royal water (from the circumstance of its being the only solvent then known for gold), and then precipitating it by a solution of tin, by which a purple-coloured powder was procured. This powder, which, from the inventor, has been called *purple precipitate of Cassius*, was then incorporated with transparent glass to form the imitative rubies. At a later period John Kunkel improved this manufacture, and made for the Elector of Cologne a cup of ruby-glass, weighing 24 pounds, a full inch in thickness, and of an equally beautiful colour throughout.

At all times a brilliant red has been more difficult to impart to glass than most other colours. The greens, blues, &c., require less care in the preparation; and consequently the appearance of the greater number of gems has been imitated with considerable success. It is impossible for us in this place to detail the various processes by which this has been effected; for such details have enabled M. Fontanieu to fill a large octavo volume. We can only glance at the most prominent facts.

What we popularly call *paste* is technically known as *strass:* this is also the French word for the same substance (from M. Strass, its reputed inventor). Paste, then, is the material with which diamonds are imitated, and by mixing up with it metallic oxides of various kinds, colours in great variety are imparted to the paste, by which it serves as a representative of the various coloured gems.

Strass is prepared, according to the method of M. Do-

nault, who has attained great proficiency in this art, from silica, potash, borax, and oxide of lead, and sometimes arsenic. Rock-crystal and flint consist almost entirely of silica; but as flint generally contains a little iron, the silica obtained from it is liable to have a tinge of colour, which is detrimental to the fidelity of the imitation: rock-crystal is therefore employed.

The crucible in which the materials are melted claims particular attention, since if the substance of which it is formed contain metallic particles, colour would be imparted to the strass. Hard porcelain and Hessian clay are the best materials for this purpose. When the crucibles are supplied with the proper quantity of ingredients, they are placed in a porcelain furnace, where they are exposed to a steady heat for twenty-four hours, and then allowed to cool very slowly, so that a kind of annealing goes on. By this means is produced a strass, or paste, which, after passing through the hands of the lapidary, who gives it the form necessary for "setting," presents us with an imitation of the diamond.

Having once produced the strass which imitates diamond, all the other gems may be imitated, by mixing with strass various metallic oxides and other substances, according to the colour which it is desired to produce. Herein is manifested great diversity of opinions, different experimenters advocating different modes of proceeding and different ingredients. One experimenter recommends the following ingredients:—To imitate *topaz*, add glass of antimony, precipitate of Cassius, and oxide of iron, to the white strass; for *ruby*, add oxide of manganese; for *emerald*, oxide of copper, iron, and chromium, and acetate of copper; for *sapphire*, oxide of cobalt; for *amethyst*, oxides of manganese and cobalt, and precipitate of Cassius; for *beryl*, glass of antimony and oxide of cobalt; for *garnet*, glass of antimony, precipitate of Cassius, and oxide of manganese.

M. Donault has given directions somewhat different from the above; but we need not particularise them, as it would carry us into too minute details. We may however mention, that he produces the imitative *rubies* by a particular treatment of the composition employed for *topaz*. This composition is 1000 parts of strass to 40 of glass of antimony and 1 of purple of Cassius; at a certain stage of its preparation it affords an opaque mass, translucent at the edges, and affording thin laminæ of a red colour. A part of this opaque topaz matter, added to 8 parts of strass melted in a Hessian crucible, and left thirty hours in a potter's furnace, affords a beautiful yellowish crystal. If this crystal be remelted by means of a blowpipe, it produces a strass nearly equal to the finest Oriental rubies.

This art (of producing imitative gems), ingenious as it is, is necessarily a confined one; for as soon as faithful copies of certain jewels are obtained, the object of the art is attained. This object is to *deceive the eye;* "for," as M. Dumas remarks, "the most perfect description of strass, if it imitate no particular and identical gem, has no value, because it deceives nobody."

There is a less perfect but a curious mode of producing artificial gems, with what are called *doublets*, by a process of cementation. The artificial gem consists, in this case, of two pieces of white transparent glass, or of crystal, which is cut into two pieces, conjointly so shaped, that both together present the external form of the gem about to be imitated. A transparent cement is then formed of Venice turpentine and mastic melted up together in certain proportions, and to the mixture is added a portion of some colouring matter, according to the nature of the gem. Carmine, crimson lake, Prussian blue, verdigris, dragon's blood, Spanish arnotto, &c., are employed, either separately or mixed one with another, until the required tint is imparted to the gemmy mixture. The doublets are then warmed to about the same temperature as the melted cement; and the upper surface of the lower doublet receiving a coating of the warm coloured cement, the upper doublet is laid upon it, to which it gradually but firmly adheres. When firm, the redundant cement is scraped off from the outside of the doublets; and the factitious gem is ready for *mounting* or *setting*. To keep the deception out of view, the lower doublet is often made rather shallower or thinner than the upper, so that when the mounting is brought half way up the gem, the edges of the joint shall be concealed.

It is evident that this mode of imitating gems is less perfect than the former, since by looking laterally through the substance the colourless glass shows itself, untinged by the colour of the cement.

Character of Washington.—In Washington we truly behold a marvellous contrast to almost every one of the endowments and the vices which we have been contemplating, and which are so well fitted to excite a mingled admiration, and sorrow, and abhorrence. With none of that brilliant genius which dazzles ordinary minds; with not even any remarkable quickness of apprehension; with knowledge less than almost all persons in the middle ranks, and many well educated of the humbler classes possess; this eminent person is presented to our observation clothed in attributes as modest, as unpretending, as little calculated to strike or to astonish, as if he had passed unknown through some secluded region of private life. But he had a judgment sure and sound; a steadiness of mind which never suffered any passion, or even any feeling to ruffle its calm; a strength of understanding which worked rather than forced its way through all obstacles; removing or avoiding rather than overleaping them. His courage, whether in battle or in council, was as perfect as might be expected from this pure and steady temper of soul. A perfectly just man, with a thoroughly firm resolution never to be misled by others, any more than by others overawed; never to be seduced or betrayed, or hurried away by his own weaknesses or self-delusions, any more than by other men's arts; nor ever to be disheartened by the most complicated difficulties, any more than to be spoilt on the giddy heights of fortune—such was this great man,—whether we regard him sustaining alone the whole weight of campaigns, all but desperate, or gloriously terminating a just warfare by his resources and his courage; presiding over the jarring elements of his political council, alike deaf to the storms of all extremes, or directing the formation of a new government for a great people, the first time that so vast an experiment had ever been tried by man; or finally retiring from the supreme power to which his virtue had raised him over the nation he had created, and whose destinies he had guided as long as his aid was required; retiring with the veneration of all parties, of all nations, of all mankind, in order that the rights of men might be conserved, and that his example never might be appealed to by vulgar tyrants. This is the consummate glory of the great American; a triumphant warrior where the most sanguine had a right to despair; a successful ruler in all the difficulties of a course wholly untried; but a warrior whose sword only left its sheath when the first law of our nature commanded it to be drawn; and a ruler who, having tasted of supreme power, gently and unostentatiously desired that the cup might pass from him, nor would suffer more to wet his lips than the most solemn and sacred duty to his country and his God required!

To his latest breath did this great patriot maintain the noble character of a captain the patron of peace, and a statesman the friend of justice. Dying, he bequeathed to his heirs the sword which he had worn in the war for liberty, charging them "never to take it from the scabbard but in self-defence, or in defence of their country and their freedom; and commanding them that when it should be thus drawn, they should never sheath it, nor ever give it up, but prefer falling with it in their hands to the relinquishment thereof"—words, the majesty and simple eloquence of which are not surpassed in the oratory of Athens and Rome. It will be the duty of the historian and the sage in all ages to omit no occasion of commemorating this illustrious man; and until time shall be no more will a test of the progress which our race has made in wisdom and in virtue be derived from the veneration paid to the immortal name of Washington!—*Edinb. Review, No. CXXXVII.*

THE MUSEUM AT BOULOGNE.

[Medal struck by Napoleon to commemorate the Invasion of England.]

THERE is very little to be learned of foreign manners at Boulogne. Since the Peace, our countrymen have resorted to it in such numbers as to have rendered it nearly as much an English as a French town. The hotel-keepers have consulted English tastes, and other classes have found it their interest to modify their arrangements with the same object. Boulogne, however, is much frequented as a bathing-place by the French themselves, and the truth is, the population has no general and distinctly defined national characteristics. Some thousands of individuals perhaps go from England to Boulogne in the expectation of catching a glimpse of foreign manners, and without any intention of proceeding beyond the environs; but although they may be disappointed in this respect, the town and neighbourhood possess several attractions of considerable interest, which the casual visitor may employ his time to advantage in examining. The Museum, amongst other places, will be found worthy of a visit. It is situated close to the guard-house adjoining the principal church of the lower or new town. An unornamented gateway leads to a quadrangle, around which are disposed the apartments of the officers of the Museum and the exhibition rooms, the latter being on the first floor. At the foot of the staircase which leads to the public rooms is placed a colossal head of Henry IV., one of the most popular of the kings of France. The original bust of bronze may be seen on its pedestal opposite the gate of the old town.

The contents of the Museum are curious and diversified, and few such repositories in an English provincial town of similar size would equal it. In France, however, the formation of historical and other collections has been for a longer period an object of public attention, and the establishments in which they are exhibited are under the direction of a member of the government, generally the Minister of Public Instruction, who has opportunities and means of encouraging them, which are not possessed by similar institutions in England. The population of the town is above 20,000, that of the commune, or parish, being 25,732, according to the census of 1836. Boulogne is the residence of a sub-prefect. The visitor to the Museum will find specimens of European and Asiatic costume, arms and armour, from the bow and reed-arrow of the savage, to the improvements which civilized people have made in the arts of designing and manufacturing offensive weapons. There are objects of Egyptian, Greek, and Roman art; statues and busts from the antique; specimens of natural history; a small gallery of paintings, containing about a hundred pictures, the older of which are by Dutch masters, presenting lonely windmills surrounded by willows, boors enjoying their rude carousals, or burgomasters and their comfortable-looking and careful wives.

We must be content in the present notice to introduce the reader to the medal-room, which contains an interesting collection, commencing at an early period and embracing the fine medals struck under the Consulate and the Empire, down to the reign of the present king. The Napoleon collection contains one of the medals intended to commemorate the invasion with which he threatened England. There are but few specimens in existence, as they were, it is said, suppressed; the failure of the scheme having egregiously betrayed either the predominant vanity and confidence of Napoleon, or what is perhaps more probable, the anticipatory inscription, "Struck at London in 1804," is merely a proof how well he knew how to excite and stimulate for his own purposes the enthusiasm and confidence of the army. The medal represents a powerful male figure disabling and crushing a monster, half man and half fish, which latter is intended to be emblematic of the British people. While preparations were making for the invasion, Boulogne and the neighbourhood was a scene of military activity which had not been witnessed in that part of Europe since Cæsar and his legions had crossed over to Britain. The "Grand Armée" consisted of 200,000 men, who were in encampments on the surrounding heights. The port of Boulogne was filled with a numerous flotilla, which was twice unsuccessfully attacked by the English; by Nelson on the 15th of August, 1801, and by Admiral Keith on the 10th of August, 1804. The defeat of the combined French and Spanish fleets in 1805, and a new European coalition, was the cause of the encampment being broken up, and the troops were marched to the Rhine. One of the rooms of the Museum contains plaster casts of the bas-reliefs on the column erected within a mile of the town by the Army of Invasion.

[Catherine de' Medicis.—Struck to commemorate the Massacre of St. Bartholomew.]

Another medal exhibits the portrait of Catherine de' Medicis. This singular woman was born in 1519, at Florence, and was thoroughly embued with the principles of policy which prevailed at that period in the Italian courts. In 1533 she was married to the son of Francis I. of France, who afterwards succeeded to his father's throne. Her husband died in 1559, and the death of Francis II. in the following year placed the government of the country in her hands as regent during the minority of her son Charles IX. Catherine had favoured the Protestants from motives of policy, after her husband's death, as her son, who had married Mary, afterwards Queen of Scots, was attached to the opposite party, and she hated an authority of which she could not partake. Her son's death led to a temporising and wavering policy, which gave opportunities for the display of that spirit of intrigue and treachery which was so congenial to her character. She flattered alternately the Guises, who were at the head of the Catholic party, and Condé and Coligny, who represented the Protestants, then numerous, influential, and in the enjoyment of considerable power, endeavouring to attain by intrigue and treachery objects which she might have secured by openness and candour. Her son was declared of age when he was fourteen, in order that she might exercise the most absolute power in his name.

At this time the state of parties was such that her purposes could be promoted only by the defeat of one or other of them. The massacre of St. Bartholomew, on the 24th of August, 1572, was a consequence of this position, and of her efforts to disembarras herself of all impediments to her wishes; for which purpose she irritated her son, by jealous feelings of his younger brother, into that dependent state which was most favourable to her objects. Catherine again became regent on the death of Charles IX., until the return of Henry III. from Poland. To her are to be attributed in a great measure the misfortunes of his reign, and the state of France, at her death in 1583, was deplorable in the extreme. Her manners were elegant, and she possessed a taste for literature and the arts, but her life was a series of cruel, artful, and unprincipled actions. A copy of the medal, in which probably her portrait was flattered, is strongly indicative of that wickedness of character which seemed natural to her. The epithet "pious and just" was never less deserved than in the case of Catherine de' Medicis.

Amongst the medals which bear impressions of female heads is one of Mary Queen of Scots, taken when young; and a simple and interesting profile of Charlotte Corday, who assassinated Marat.

[Ancient Boulogne Flagon.]

[Old Drinking Cup.]

In the room adjoining the medal-room there is a case containing flagons and drinking-cups, which the authorities of Boulogne were antiently accustomed to use when they received the visits of distinguished persons. Two of these are here represented, one of which has the arms of the town, a swan and three pellets, struck on each side. The other is of the fashion of the fourteenth century.

[To be continued.]

DEMOSTHENES.

[Continued from No. 425.]

In 339 B.C. Philip's appointment to be general of the Amphictyonic League gave him a more direct influence than he had yet possessed; and in the same year the decisive victory of Chæroneia won over the combined forces of Thebes, Athens, &c., made him master of Greece. Demosthenes served in this engagement, but joined early in the flight, with circumstances, according to report, of marked cowardice and disgrace. He retired for a time from Athens, but the cloud upon his character was but transient; for shortly after he was entrusted with the charge of putting the city in a state of defence, and was appointed to pronounce the funeral oration over those who had been slain. After the battle of Chæroneia, Philip, contrary to expectation, did not prosecute hostilities against Athens. On the contrary, he used his best endeavours to conciliate the affections of the people, but without success; the party hostile to Macedon soon regained the superiority, and Demosthenes was proceeding with his usual vigour in the prosecution of his political schemes, when news arrived of the murder of Philip, in July, 336. His daughter had then lately died; nevertheless, in violation of national usage, he put off his mourning, and appeared in public crowned with flowers, and with other tokens of festive rejoicing. This act, a strong expression of triumph over the fall of a most dangerous enemy, has been censured with needless asperity: the accusation of having been privy to the plot for Philip's murder beforehand, founded on his own declaration of the event some time before intelligence of it came from any other quarter, and the manifest falsehood as to the source of his information, which he professed to derive from a divine revelation, involves, if it be judged to be well founded, a far blacker imputation.

Whether or not it were of his own procuring, the death of Philip was hailed by Demosthenes as an event most fortunate for Athens, and favourable to the liberty of Greece. Thinking lightly of the young successor to the Macedonian crown, he busied himself the more in stirring up opposition to Alexander; and succeeded in urging Thebes into that revolt which ended in the entire destruction of the city, B.C. 335. This example, as it well might, struck terror into Athens. Alexander demanded that Demosthenes, with nine others, should be given up into his hands, as the authors of the battle of Chæroneia and of the succeeding troubles of Greece; but finally contented himself with requiring the banishment of Charidemus alone.

Opposition to Macedon was now effectually put down, and until the death of Alexander we hear little more of Demosthenes as a public man. During this period, however, one of the most memorable incidents of his life occurs, in that contest of oratory with Æschines which has been more celebrated than any strife of words since the world began. The origin of it was as follows. Some time about the battle of Chæroneia (Mr. Clinton assigns strong reasons for believing it to have been shortly after; but the chronology is uncertain) one Ctesiphon brought before the people a decree for presenting Demosthenes with a crown for his distinguished services; a

complimentary motion, in its nature and effects very much like a vote of parliament declaratory of confidence in administration. Æschines, the leading orator of the opposite party, arraigned this motion, as being both untrue in substance and irregular in form; he indicted Ctesiphon on these grounds, and laid the penalty at 50 talents, equivalent to above 10,000*l*. Why the prosecution was so long delayed does not clearly appear; but it was not brought to an issue until the year 330, when Æschines pronounced his great oration "Against Ctesiphon." Demosthenes defended him in the still more celebrated speech "On the Crown." These, besides being among the most admirable specimens of rhetorical art, have the additional value, that the rival orators, being much more anxious to uphold the merits of their own past policy and conduct, than to convict or defend the nominal object of prosecution, have gone largely into matters of self-defence and mutual recrimination, from which much of our knowledge of this obscure portion of history is derived. Æschines lost the cause, and not having the votes of so much as a fifth part of the judges, became liable, according to the laws of Athens, to fine and banishment. He withdrew to Rhodes, where he established a school of oratory. On one occasion, for the gratification of his hearers, he recited first his own, then his adversary's speech. Great admiration having been expressed of the latter, "What then," he said, "if you had heard the brute himself;"* bearing testimony in these words to the remarkable energy and fire of delivery which was one of Demosthenes's characteristics and chief excellences as an orator.

A similar fate overtook Demosthenes himself a few years later, B.C. 324. Harpalus, an officer high in rank and favour under Alexander, having been guilty of malversation to such an extent that he dared not await discovery, fled to Greece, bringing with him considerable treasures and a body of mercenary soldiers. He sought the support of the Athenians; and, as it was said, bribed Demosthenes not to oppose his wishes. Rumours to that effect got abroad, though his proposals were rejected by the assembly, and Demosthenes was called to account, and fined 50 talents, as having been bribed to give false counsel to the people. The amount of the fine acted as sentence of banishment, and he retired to Ægina. Like Cicero, when placed in a similar situation, he displayed an effeminacy of temper and unmanly violence of regret under this reverse of fortune. In the following year however the death of Alexander restored him to political importance; for when that event opened once more to the Athenians the prospect of shaking off the supremacy of Macedonia, Demosthenes was recalled with the most flattering marks of public esteem. He guided the state during the short war waged with Antipater, the Macedonian viceroy; until the inequality of the contest became evident, and the Macedonian party regained its ascendency. Demosthenes then retired to the sanctuary of Calauria, an island sacred to Neptune, on the coast of Argolis. Sentence of death was passed on him in his absence. He was pursued to his place of refuge by the emissaries of Antipater, and being satisfied that the sanctity of the place would not protect him, took poison, which as a last resort he carried about his person concealed in a quill. Thus, says Plutarch, in the spirit of Pagan philosophy, "since the god Neptune denied him the benefit of his sanctuary, he betook him to a greater, and that was death; whereby he saved himself out of the soldiers' hands of the tyrant, and also scorned the bloody cruelty of Antipater."

The following table of the order in which the public orations of Demosthenes were spoken is given by Mr. Clinton, in his valuable 'Fasti Hellenici,' Appendix, c. 20:—

B.C.

355. Against Androtion.
Against Leptines.
354. On the Symmories.
353. Against Timocrates.
For the Megalopolitans.
352. Against Aristocrates.
First Philippic.
351. For the Rhodians.
349. First Olynthiac. } Otherwise called Second, Third, and Fourth Philippics.
Second Olynthiac. }
Third Olynthiac. }
348. Against Midias.
347. Fifth Philippic, forming part of the first in our present copies.
346. On the Peace, otherwise the Sixth Philippic.
344. Second Philippic, otherwise the Seventh.
343. Concerning Halonnesus, otherwise Eighth Philippic.
On Malversation in the Embassy.
341. On the Chersonese, otherwise the Ninth Philippic.
Third Philippic, otherwise the Tenth.
Fourth Philippic, otherwise the Eleventh.
339. Against Neæra.
339. Against Philip's Letter, otherwise the Twelfth Philippic.
338. Or later, Two against Aristogiton.
Funeral Oration.
336. Or later, Against Theocrines.
334. Or later, On the Treaty with Alexander.
330. On the Crown.
On the Contribution—of doubtful date.

Of these, the Eleventh Philippic, and those against the Letter, concerning Halonnesus, on Contribution, on the Treaty with Alexander, and the Funeral Oration, are of doubtful authenticity.

The private Orations are thirty-one in number. They are very valuable to those who desire to study the laws and social condition of Athens.

Most of Demosthenes's speeches are short, at least compared with modern oratory. He rarely spoke extempore, and bestowed an unusual degree of pains on his composition. That style which is described by Hume as "rapid harmony exactly adapted to the sense; vehement reasoning without any appearance of art; disdain, anger, boldness, freedom, involved in a continued stream of argument," instead of being, as it would seem, the effervescence of a powerful overflowing mind, was the laboured produce of much thought, and careful, long continued polish. In this respect there is a striking contrast between Demosthenes and the great statesman who is commonly called the most Demosthenean of English orators—Mr. Fox.* To multiply descriptions and panegyrics, both ancient and modern, would be easy. One has already been given from the latest and the best historian of Greece. We conclude with this short and pointed passage from Dionysius of Halicarnassus. "Demosthenes, succeeding as he did to such eminent orators, did not deign to copy any single model, deeming all his predecessors half artists, as it were, and imperfect. But having selected from these all their respective excellences, he blended them together, and combined from many sources a style of composition magnificent yet polished; full without overflowing; refined yet unaffected; adapted to popular assemblies, yet natural; severe yet animated; concise yet flowing; gentle yet keen; moderate yet passionate; like Proteus, celebrated by the ancient poets, who could easily assume in succession every variety of form. Whether he was some

* *αγριον θηριον*—the wild beast.

* On this subject see a passage in the 'Edinburgh Review' for October last, "On the Reigns of George III. and IV." p. 214.

deity or genius deluding the eyes of men, or, what is the more probable conjecture, some mortal prodigy of eloquence and wisdom seducing the senses of his audience, some such opinion I entertain respecting the style of Demosthenes; and this is the character that I give of it, that it is made up of every kind."

ON THE COMMERCIAL VALUE OF TULIPS IN THE SEVENTEENTH CENTURY.

One of the most remarkable instances of the influence of fashion on the prices of ornamental articles is afforded by the tulip. The tulip, when in its natural or uncultivated state, does not present any striking beauties as respects colour; but when it has undergone the culture which the florist bestows upon it, the variety and beauty of its colours are greatly increased, although the flower, botanically speaking, is weakened and deteriorated.

The tulip grows wild in many parts of the East, and appears to have been first known in Italy and Germany about the middle of the sixteenth century. Conrad Gesner, a German botanist, first described this flower botanically, from a specimen which he saw in the garden of Counsellor Herwart, at Augsburg, in 1559: the seeds of this flower had been brought from Constantinople. After the plant became thus known, Dutch merchants and the nobility of Vienna sent at different times to Constantinople for roots and seeds of the tulip.

In the middle of the sixteenth century, the *Tulipomania*, as it has been called, reached an extraordinary height, the infatuated desire to possess peculiar specimens of this flower having raised the price enormously: this mania showed itself most prominently in some of the cities of the Netherlands. There was a particular species of the tulip, called the Viceroy, for one single root of which the following articles were given:—

2 lasts of wheat	valued at 448	florins.
4 do. rye	" 558	"
4 fat oxen	" 480	"
8 fat swine	" 240	"
12 fat sheep	" 120	"
2 hogsheads of wine	" 70	
4 tuns of beer	" 32	"
2 do. of butter	" 192	"
1000 pounds of cheese	" 120	"
A complete bed	" 100	
A suit of clothes	" 80	"
A silver beaker	" 60	"
Total	2500	florins.

As such a clumsy mode of effecting an exchange for the purchase of a tulip could not be generally adopted, the roots were afterwards sold by weight, the standard of a weight being a *perit*, which was equivalent to rather less than an English grain. A root of a species called Admiral Liefken, weighing 400 perits, sold for 4400 florins; 446 perits of a species called Admiral von der Eyk sold for 1620 florins; and different species, called Schilder, Semper Augustus, Viceroy, &c., sold for equally large sums. Two thousand florins was a common price for a root of the species Semper Augustus; and on one occasion it happened that only two roots of it were to be had, one at Amsterdam and the other at Haarlem. For one of these roots an individual agreed to give 4600 florins, together with a new carriage, two grey horses, and a complete harness. Another person agreed to give twelve acres of land for a root; for it frequently happened that if a person who wished to purchase a tulip-root had not the requisite cash by him, he parted with land, houses, cattle, or even clothes. The trade became so lucrative, that persons in all stations of life, from noblemen to turf-diggers, embarked in it. Some who had previously lived in poverty were enabled to launch their carriages; and one person gained more than 60,000 florins in the course of four months. The bargains were generally carried on in taverns, where notaries and clerks were regularly engaged; and the business of the day generally terminated with a sumptuous entertainment, at which the traders, without regard to difference of station, feasted in common.

When tulips were thus bought and sold for more than their weight in gold, it is not surprising that a system of stock-jobbing sprung up, in which tulips were nominally purchased without changing hands at all. Beckmann thus illustrates this traffic:—A nobleman bespoke of a merchant a tulip-root, to be delivered in six months, at the price of 1000 florins. During the six months the price of that species of tulip must have risen or fallen, or remained as it was. We will suppose that at the expiration of that time the price was 1500 florins. This was favourable to the nobleman, and he received 500 florins from the merchant, who was a clear loser to that amount —the root itself not changing hands. If the price of that species had fallen at the expiration of the six months to 800 florins, the nobleman became a loser of 200, which he had to pay to the merchant. If the market-price were 1000 florins, no transfer either of money or of root took place, and the bargain terminated. Henry Munting, in 1636, sold to a merchant at Alkmar a tulip-root for 7000 florins, to be delivered in six months. During that time the value fell to 6300, so that the merchant had to pay 700 florins, which Munting gained; but, as Munting's son observed, "though my father received 700 florins for nothing, he would much rather have sold the root itself for 7000."

The fall of this traffic was as sudden as its rise was extraordinary. The speculators were of various degrees, both in honesty and in station; and when "settling-day" arrived, there were numerous defaulters. This engendered distrust; and as the more respectable speculators began to feel some degree of shame at the discreditable traffic—or rather gambling—in which they had been engaged, the mania declined: the holders wished to dispose of their tulips in reality, and not merely nominally; but it was then found that the demand for the tulips themselves was by no means so great as the holders wished: —prices fell—engagements were broken—unsuccessful appeals were made to the magistrates;—and after various struggles between the vendors, who, in 1637, insisted that the roots should be actually purchased at the prices named for them, and the buyers, who refused to accede to that plan, the stock-jobbing bargains became null and void; tulips were sold at a price proportionate to the demand for them;—and thus ended one of the most extraordinary species of traffic that civilized Europe was ever engaged in. On one occasion during this period, a sailor carried some goods to the house of a Dutch merchant, who gave the man a herring for his trouble. The man, observing some tulip-roots in the merchant's warehouse, took up one and bit it, under the impression that it was an onion:—the result was a loss to the merchant greater than if he had entertained the Prince of Orange himself to a feast.

In the 218th number of the 'Tatler' will be found a pleasant satire on the mania for giving high-flown names to different species of the Tulip.

Penzance Myrtles.—These plants thrive in the open air, and commonly attain the height of ten or twelve feet; they may be seen trained on the front of some of the houses in Penzance to double that height. A sufficient quantity of cuttings was obtained from a tree of this description, covering one of the houses, in the course of six weeks, to supply the oven with fuel for three months.—*Dr. Paris's Guide to Mount's Bay and Land's End.*

Every new discovery may be considered as a new species of manufacture, awakening moral industry and sagacity and employing, as it were, a new capital of mind.

THE KINGFISHER, OR NEST OF THE HALCYON.

[From 'The Penny Cyclopædia,' article Kingfisher.]

Setting aside the fable of the floating cradle in which during the Halcyon days the bird was said to rear its young, we shall find that ornithologists have differed not a little as to the actual nest of this brilliant bird. Pennant says that it makes its nest in holes in the sides of cliffs, which it scoops to the depth of three feet, and in holes in the banks of rivers, chiefly those which before belonged to the water-rat; and he states the number of the eggs to be from five to nine, of a most beautiful transparent white. The nest, he adds, is very fetid. Pennant then refers to Aristotle's description of the nest of the Mute Halcyon, in which the latter states that it resembled those spherical concretions that are formed by the sea-water; that it was hollow within, that the entrance was very narrow, so that if it should upset, the sea would not enter; that it resisted any violence from iron, but yielded to a blow of the hand, and when thus broken was soon reduced to powder, and that it was composed of the bones of a sea-fish called the Belone,—for the bird lives on fish. Aristotle then states the number of eggs at five or thereabouts (*Hist. Anim.*, ix. 14). Pennant, who, as we have observed, considers the Mute Halcyon of Aristotle to be our common Kingfisher, observes that much of the description above quoted seems to be founded on truth. The form of the nest, he remarks, agrees almost exactly with the curious account of it by Count Zinnani. "The materials, which Aristotle says it (the nest) was composed of, are not entirely of his own invention. Whoever has seen the nest of the kingfisher will observe it strewed with the bones and scales of fish, the fragments of the food of the owner and its young; and those who deny that it is a bird which frequents the sea must not confine their ideas to our northern shores, but reflect, that birds inhabiting a sheltered place in the more rigorous latitudes may endure exposed ones in a milder climate. Aristotle made his observations in the East, and allows that the Halcyon sometimes ascended rivers, possibly to breed, for we learn from Zinnani, that in his soft climate, Italy, it breeds in May, in banks of streams that are near the sea; and having brought up the first hatch, returns to the same place to lay a second time." Now, it will be observed that Pennant, in his own description of the nest, speaks of nothing but the hole and the fetid remains; and though Zinnani gives a very good description of the excavated hole, he speaks with caution of the collection of fish-remains therein.

Montagu, in his *Ornithological Dictionary*, says that the bird generally takes possession of a rat's hole to deposit its eggs; he then proceeds as follows: "The many curious accounts which have been given of the nest of this bird induced us to take some pains to discover the fact. The result of our researches are (is), that the hole chosen to breed in is always ascending, and generally two or three feet in the bank; at the end is scooped a hollow, at the bottom of which is a quantity of small fish-bones, nearly half an inch thick, mixed in with the earth. This is undoubtedly the castings of the parent birds, and not the young, for we have found it even before they have eggs, and have every reason to believe that both male and female go to that spot, for no other purpose than to eject this matter, for some time before the female begins to lay, and that they dry it by the heat of their bodies, as they are frequently known to continue in the hole for hours, long before they have eggs. On this disgorged matter the female lays to the number of seven eggs, which are perfectly white and transparent, of a short oval form, weighing about one dram. The hole in which they breed is by no means fouled by the castings; but before the young are able to fly it becomes extremely fetid by the fæces of the brood, which is (are) of a watery nature, and cannot be carried away by the parent birds, as is common with most of the smaller species. In defect of which, instinct has taught them to have the entrance of their habitation ascending, by which means the filthy matter runs off, and may frequently be seen on the outside. We never could observe the old birds with anything in their bills when they went to feed their young; from which it may be concluded they eject from their stomach for that purpose."

Mr. Selby, after noticing the ejection of bones and other indigestible parts, in pellets, by the mouth of these birds, goes on to state that they breed in the banks of the streams they haunt, either digging a hole themselves, or taking possession of that of a water-rat, which they afterwards enlarge to suit their convenience. He then proceeds as follows:—"The bearing of the hole is always diagonally upwards, and it pierces two or three feet into the bank. The nest is composed of the above-mentioned pellets of fish-bones, ejected into a small cavity at the farther end of this retreat, and upon which the eggs are laid, to the number of six or seven, of a transparent pinkish white." He then quotes the remarks of Montagu on the sloping direction of the hole, and the use of that direction in carrying away offensive matter. (*Illustrations of British Ornithology*, vol. i.)

Mr. Rennie, in his edition of Montagu's 'Dictionary,' observes, that from the high authority of Montagu, the description above given has been copied by every recent writer, with the exception of Temminck,* who says nothing on the subject, and Wilson, who says (*Am. Orn.*, iii. 60), of his belted Kingfisher (*Alcedo Alcyon*), that "its nest is neither constructed of glue nor fish-bones." Mr. Rennie then proceeds thus:—"We are certain of the fact that this will apply equally to our own kingfisher. In the bank of a stream at Lee in Kent, we have been acquainted with one of these nests in the same hole for several successive summers, but so far from the exuviæ of fish-bones ejected, as is done by all birds of prey, being dried on purpose to form the nest, they are scattered about the floor of the hole in all directions, from its entrance to its termination, without the least order or working up with the earth, and all moist and fetid. That the eggs may by accident be laid upon portions of these fish-bones is highly probable, as the floor is so thickly strewed with them that no vacant spot might be found, but they assuredly are not by design built up into a nest. The hole is from two to four feet long, sloping upwards, narrow at the entrance, but widening in the interior, in order perhaps to give the birds room to turn, and for the same apparent reason the eggs are not placed at the extremity. I am not a little sceptical as to its sometimes selecting the old hole of a water-rat, which is the deadly enemy to its eggs and young; but it seems to indicate a dislike to the labour of digging. It frequents the same hole for a series of years, and will not abandon it, though the nest be repeatedly plundered of the eggs or young. The accumulation of cast-bones in one of these old holes has perhaps given origin to the notion of the nest being formed of them."

Mr. Gould, in his *Birds of Europe*, states that the eggs are deposited in a hole, such as those above alluded to, by the female, without making any nest.

Small fish, such as Sticklebacks and Minnows, form the food of the Kingfisher principally, but M. Temminck and Mr. Rennie say that the bird will also eat fry or spawn (frai), slugs, worms, and leeches.

It sits immoveable on some overhanging twig, watching for its prey, and when it has secured a passing fish by a sudden dash, beats it to death against a stone on the ground, and then swallows it. At other times it will hover suspended over the water and dart on its prey, but the bird usually makes its attack from a station. The editor of the last edition of Pennant states that it has been seen balancing itself over the water in which a great many of the small, round, shining beetles were swimming swiftly in circles (*gyrinus natator ?*), and which it makes its prey.

This species, when adult, appears to be mute except at the season of pairing; but the young are very clamorous, and frequently betray their retreat before they leave the nest —which they do not quit till they are fully fledged—by their cries. Before they provide for themselves, which they soon do, they sit on some branch while the parents fish for them, and on their approach with food are very noisy.

* But Temminck ('Manuel,' 1820) says that the bird nestles in holes in the earth, most frequently in those abandoned by the water-rats, along the abrupt banks of rivers, often under the roots of trees, in the hollows of trees, and sometimes in the holes of rocks, and that it lays from six to eight eggs, of a lustrous white.

*** The Office of the Society for the Diffusion of Useful Knowledge is at 59, Lincoln's Inn Fields.

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